MICHAEL FIELDS AGRICULTURAL INSTITUTE

KERNZA® COMMUNITY BAKE

by Coral Weinstock and Nicole Tautges



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In collaboration with



Project Description

In June of 2021, the Michael Fields Agricultural Institute provided 50 home bakers around the country with 10 oz. of Kernza® flour, with instructions to experiment with the flour and explore how it tastes and bakes differently than conventional wheat flour.

This report showcases the results of the home bakers' efforts.

These home bakers brought an incredible wealth of experience, art, craft, and love to the project, and we are proud to showcase them here.

Kernza® Fast Facts

- Kernza® is a delicious, highly nutritious grain harvested from a widespread perennial grass
- As a perennial, Kernza® does not require annual tillage and, once established, requires minimal fertilizer and little to no herbicide application
- Kernza® has a critical role to play in soil health and climate change reversal! Its deep roots (10+ feet long!) create rich soil organic matter, and make a sink that pulls down atmospheric carbon
- Kernza® grain can be substituted for annual wheat in foods like baked goods or beer, or can be eaten as a whole grain









Thanks io Perennial Paniry

This project would not have been possible without the hard work and support of the folks at Perennial Pantry.

To get Kernza® grain to market, considerable time needs to be invested to clean the grain and develop milling practices that optimize flour performance. Perennial Pantry has become experts in this arena.

Support them and the Kernza® movement by purchasing Kernza® flour, whole grain, or pancake mix at https://perennial-pantry.org











Growing Kernza®

Fall 2019

Kernza® is planted on Upper Midwest farms

Summer 2020

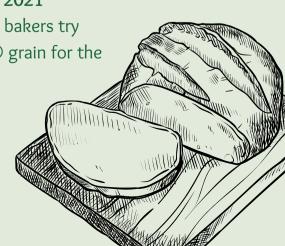
Farmers harvest Kernza® grain by combine

Fall 2022

Perennial Pantry mills Kernza® grain into flour

Summer 2021

50 home bakers try Kernza® grain for the first time





Emily

Pittsburgh, Pennsylvania

"I used Kernza® flour to make the coffee cake in the photo, and it was delicious. I used a combination of all-purpose flour and Kernza® flour- about 40% of the total flour amount was Kernza®. I haven't tried pure Kernza® bakes yet. This particular coffee cake recipe called for rye flour, so I just subbed Kernza® in for the rye amount. So I guess my tip/trick would be- try substituting Kernza® into recipes that call for rye. That might also work for recipes that call for wheat."









Katie

New Berlin, Wisconsin



Perennial Pantry chocolate chip cookies

"I made chocolate-chip cookies from the Kernza® flour, and they turned out great! I used a recipe from the [Perennial Pantry] website... it used browned butter and mostly brown sugar. My kids really liked them too, maybe even better than the browned-butter recipe we normally use."



Michal

Chicago, Illinois

As for baking, I added 1 and 1/2 cup of cooked grain to my rye sourdough recipe - in the same way I would add spent brewing grain. The resulting loaf gained not only multiple layers of flavor but the crumb benefited from additional moisture."



Rye sourdough with Kernza®







Michal

Chicago, Illinois

"We tried cooked Kernza® in two dinner dishes, with outstanding results. I am definitely not a food writer but the range of imparted flavors goes well beyond 'nutty' and 'earthy' into a whole spectrum of delightful sensations."

Grilled chicken breast, grilled corn and mango salsa on arugula with a bed of Kernza®





In The Kiichen Wiih...

Suzanne

Waterford, Wisconsin

"The smell of the dough was quite sweet and had a bit of a cinnamony taste to it. Overall it was quite easy to work with and I would definitely use it again when it comes out on the market."



Kernza® blueberry scones

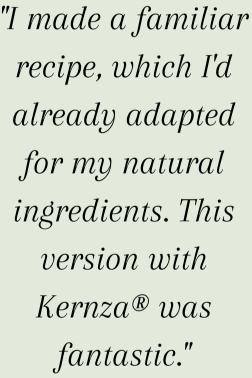




In The Kiichen Wiih...

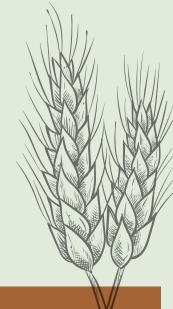
Juniper

Avoca, Wisconsin





Kernza® winter squash cake



WINTER SQUASH CAKE

Recipe by Juniper Sundance

"A good recipe for using leftover squash, when your garden or CSA provides

them in a larger size than your household can consume in a meal."

MATDUATIONS

INGREDIENTS 1 ½ cup cooked butternut	1. Steam or bake squash until soft
2 eggs	2. When cool enough to handle, remove the skin and mash the flesh with a fork or potato masher.
2/3 c sunflower oil	Don't worry about getting it entirely smooth, but
1/2 c honey	avoid large lumps
1/4 c milk	3. Blend together eggs, oil and honey until even
2 c f Kernza® flour	consistency
2 tsp baking soda	4. Add squash and milk. Stir well
2 tsp baking power ½ tsp salt	5. In a separate bowl, mix dry ingredients, including nuts. Add this to the squash bowl and mix quickly
2 tsp ginger, organic	6. Spoon batter into a greased, 9 x 12 cake pan
½ tsp cinnamon	
1 c. walnuts, finely chopped	7. Bake at 350 for 35 minutes
Optional: 1 T maple sugar	8. When cake is out of the oven and mostly cooled, drizzle top with maple sugar

NOTES

I use a nut grinder to finely chop the nuts. If your family likes crunchy foods, use a knife to chop nuts moderately

Moist, rich, and delicious served plain.

For a treat, try topping with vanilla yogurt or cranberry sauce



Natalie

Chicago, Illinois

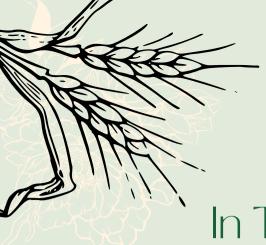






"I just did my first bake with the Kernza® flour and wanted to send along some pictures and my recipe. I made granola cookies (I wanted to make oatmeal cookies but had just used all my oats to make granola) and they came out great! Once cooled, the cookies were snappy, crunchy, and melt in the mouth, not too different from when I make a similar recipe with whole wheat flour.

Very delicious!"





Sherry

Sussex, Wisconsin





"My first baking experience with Kernza® flour - Chocolate Biscotti. I have never made biscotti before but thought this would be good to try since it doesn't require a lot of rising. I did not mix with regular flour. I plan to make another batch and may add xanthan gum to it to see if it gives it a better texture - was more crumbly than biscotti should be."

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Wauwatosa, Wisconsin

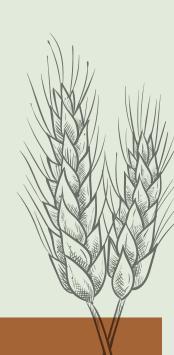
"I substituted the Kernza® flour 1:1 for the whole wheat flour in this recipe, using the whole wheat dough setting on my 2-lb Panasonic machine. The recipe took three cups of unbleached white flour plus two cups of Kernza® flour to make this very wet dough workable.

Overall, the Kernza® flour seems comparable to whole wheat flour in the bread machine. Adding vital wheat gluten may improve the texture.

The texture of the finished product was more cake-like than the tighter crumb of a standard cinnamon roll, but very acceptable! An easy recipe with an impressive nutritional profile for a dessert."



Kernza® bread machine cinnamon rolls





In The Kitchen With...



Lactation oatmeal cookies

Ann

Ridgeway, WI

"I used [the Kernza® flour] in 3 recipes that I make often. All of the results were delicious. More flavorful than just unbleached [wheat] flour, and the dough was similar to handle. In the bread, it didn't rise quite as much but was a good texture."



Everything (but the bagel) bread



Cheese & Spinach filled Calzones



Kernta Test One July 19 Granola Cookies July 19

1 Stick butter, sobtened

1/2 flax egg (1/2 +bsp ground flax +

160 g Kernza 1/2 otsp baking soda 1/2 top Kosher (salt (Diamond Crystal) 1 top cinnamon

75 of granola (homemade, not very

CNIPS OVEN@3557°

- 1. Creamed butter & sugar by hand. Added flax egg & vanilla & gave another good mix.
- 2. Added flour, baking soda, salt, to combine
- 3. Stimed in granola + chocolate. Thosp-sized scoops >12 to a half sneet pan.
- 4. Baked for 8 min, tapped pan on counter to deflate, then baked 7 more minutes.













Madison, Wisconsin

"The [pizza] dough was 50% Kernza® and 50% wheat (white bread flour) with a small amount of additional gluten added. It handled OK--I really had to pay attention to know when I was nearing the limit of its elasticity.



I was surprised at how strong the flavor is--I describe it as tasting like graham crackers.

I have enough left that I think we'll try a shortbread--that would be a nice way to really feature the flavor of the grain."







Monica

Chicago, Illinois

"I used the Kernza® flour in my standard banana bread recipe. I went with mini-loaves, due to comments about the flour's lack of structure. My family reviews are positive! I think the loaves are a little soft, but the flour did remind me a bit of baking with Irish wholemeal flour."

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Perennial Thanks to All the Incredible Home Bakers and Chefs Who Generously Shared Their Skills, Photos, Food, and Enthusiasm!



Agriculturalists are most rewarded when they see their hard-won grains on the table and an important part of home, hearth, and family.

The Kernza® movement is all about these concepts -- environmental and human health leading to joyful lives in harmony with nature and good food.

To be a part of the movement visit https://kernza.org

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